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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/986,641	11/09/2001	Christian Hardy	SCHN:010	5619

7590 07/13/2004
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EXAMINER

KIM, HAROLD J

ART UNIT	PAPER NUMBER
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2182

DATE MAILED: 07/13/2004

8

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/986,641

Applicant(s)

HARDY ET AL.

Examiner

Harold Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 November 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-22 are presented for examination.
2. It is noted that although the present application does contain line numbers in the specification and claims, the line numbers in the claims do not correspond to the preferred format. The preferred format is to number each line of every claim, with each claim beginning with line 1. For ease of reference by both the Examiner and Applicant, all future correspondence should include the recommended line numbering.
3. The drawings are objected to because the drawings are not properly described or labeled.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 1, 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Lebeau, US Patent no. 5,870,626.**

6. In re claim 1, Lebeau shows programmable adapter device between a higher level communication protocol supported by higher level equipment and at least one lower level communication protocol supported by the lower level automation equipment [col 1, lines 34-61; fig 1], the device comprising an adapter fitted with a processing unit capable of executing program instruction, a higher level interface that can connect with a higher level interface in the higher level equipment, and a lower level interface that can connect with a lower level interface on the lower level equipment, wherein: the

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adapter comprises a first memory containing a conversion program [col 1, lines 50-56] between the higher level protocol and a lower level protocol, that can be downloaded from the higher level equipment and executed by the processing unit in the adapter, the adapter comprises a second non-volatile memory containing a resident driver program that can be executed by the processing unit in order to initialize communication with the higher level equipment using the higher level communication protocol and download the conversion program into the first memory [col 2, lines 25-55; col 3, lines 1-25 and 45-52; col 4, lines 1-7; fig 1].

7. In re claims 6 and 7, Lebeau shows a lower level connecting cable between the lower level interface of the adapter and the lower level interface of the lower level equipment, wherein the lower level connecting cable contains integrated recognition means, detectable when the cable is connected to the lower level interface of the adapter, enabling the processing unit of the adapter to determined a complete identifier of the lower level protocol using the resident program [col 2, lines 25-55; col 3, lines 1-25 and 45-52; col 4, lines 1-7; fig 1].

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation

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under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 2-5, and 8-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lebeau, US Patent no. 5,870,626.

11. In re claims 2-5 and 8-22, Lebeau does not explicitly show the first memory is a volatile memory, buffer memory area, using different communication channels as a function of the criticality of the messages to be transmitted, USB, BLUETOOTH, IEEE 1394-1995 standard, ModBus, Ethernet, TCP/IP, FIP, CAN, CANopen. However, it is well known in the art of computer communication to have volatile memory, buffer memory area, using different communication channels as a function of the criticality of the messages to be transmitted, USB, BLUETOOTH, IEEE 1394-1995 standard, ModBus, Ethernet, TCP/IP, FIP, CAN, CANopen standards. Therefore, Lebeau does not need to specifically show the limitations since one skilled in the art at the time of invention is presumed to know something about the art apart from what the reference literally disclose. *In re Jacoby*, 309 F.2d 513, 135 USPQ 317 (CCPA 1962). It is also well settled that obviousness may be concluded from common knowledge and common sense of the person skilled in the art without a specific hint or suggestion. *In re Bozek*, 416 F.2d 1385, 163 USPQ 545 (CCPA 1969).

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Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Further references of interest are cited on Form PLO-892, which is attachment to this office action.

Any response to this action should be mailed to:

Mail Stop _____
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

The centralized fax number is 703 872-9306.

The centralized hand carry paper drop off location is:

U.S. Patent and Trademark Office
2011 South Clark Place
Customer Window
Crystal Plaza Two, Lobby, Room 1B03

Any inquiry of a general nature or relating to the status of this application should be directed to the technology center receptionist whose telephone number is (703) 306-5631.

Direct any inquiries concerning drawing review to the Drawing Review Branch (703) 305-8404.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harold Kim whose telephone number is 703-305-1948. The examiner can normally be reached on Monday-Thursday 6AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 703-308-3301. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Harold J. Kim

Patent Examiner

June 27, 2004/HK